

Amendments to the Claims:

In the Claims:

Claims 1-26 are pending in the Application. In the Office Action, the Examiner rejected claims 1-26. Please amend claims 1,4, 17, 25, and 26, leaving for the Examiner's consideration claims 1-26. All pending claims are reproduced below, including those that remain unchanged.

1. (Currently Amended) In a computer system having an operating system and one or more input/output devices, a method for testing the input/output device, the method comprising:

determining a device driver for the input/output device;

determining a class to which the device driver belongs; and

utilizing configuration information in the device driver class to obtain information about how the input/output device interacts with the computer system and how the input/output device can be accessed; and

performing a diagnostic test based on the information about how the input/output device interacts with the computer system and how the input/output device can be accessed that is obtained from the driver class the class of the device driver.

2. (Original) The method of claim 1 wherein the step of determining a device driver occurs while the operating system is active.

3. (Original) The method of claim 1 further comprising coordinating access to the input/output device prior to the step of performing a diagnostic test.

4. (Currently Amended) A method for performing diagnostics on a computer hardware device having a device driver for interfacing with the computer hardware device, the method comprising:

publishing capabilities of the device driver;
receiving the capabilities of the device driver; ~~and~~

determining, from the capabilities of the device driver, information about how the computer hardware device interacts with a computer system and how the computer hardware device can be accessed; and

~~performing a diagnostic test on the computer hardware device, based on the capabilities of the device driver~~ the information about how the computer hardware device interacts with a computer system and how the computer hardware device can be accessed.

5. (Original) The method of claim 4 wherein the step of receiving capabilities of the device driver further comprises identifying capabilities of the device driver by a diagnostic module.

6. (Original) The method of claim 4 further comprising coordinating access to the computer hardware device prior to the step of performing a diagnostic test.

7. (Original) The method of claim 5 wherein the step of performing a diagnostic test further comprises testing the computer hardware device using the diagnostic module.

8. (Original) The method of claim 4 further comprising determining the device driver is for interfacing with the computer hardware device.

9. (Original) The method of claim 4 wherein the step of publishing capabilities of the device driver further comprises broadcasting that the device driver is capable of accessing the computer hardware device in parallel with a diagnostic module after allocating an area of the computer hardware device for testing.

10. (Original) The method of claim 4 wherein the step of publishing capabilities of the device driver further comprises broadcasting that the device driver is capable of accessing the computer hardware device in parallel with a diagnostic module if the device driver is notified by the diagnostic module when testing is complete.

11. (Original) The method of claim 4 wherein the step of publishing capabilities of the device driver further comprises broadcasting that the device driver is capable of accessing the computer hardware device in parallel with a diagnostic module if the device driver is off-line.

12. (Original) The method of claim 4 wherein the step of publishing capabilities of the device driver further comprises broadcasting that the device driver is capable of being passed through to access the computer hardware device.

13. (Original) The method of claim 4 wherein the step of publishing capabilities of the device driver further comprises broadcasting that the device driver is capable of being passed through when in diagnostic mode to access the computer hardware device.

14. (Original) The method of claim 4 wherein the step of publishing the capabilities of the device driver further comprises broadcasting that only diagnostics embedded in the device driver may perform diagnostics on the computer hardware device.

15. (Original) The method of claim 1 further comprising allocating an area of the input/output device for testing the device.

16. (Original) The method of claim 15 wherein the step of performing a diagnostic test is done directly on the area allocated, and further comprises the step of releasing the area allocated when the test is concluded.

17 (Currently Amended) In a computer system having an operating system and at least one hardware device, a hardware access layer interface for performing diagnostics, the interface comprising:

a device driver belonging to a class of device drivers for managing the hardware device;
a kernel module for communicating with the device driver and the operating system to obtain information about how the hardware device is accessed; and

a diagnostic module for coordinating with the kernel module and/or the device driver ~~in order to perform diagnostics on the hardware device and utilizing the information about how the hardware device is accessed to perform diagnostics on the device independently of the device driver.~~

18. (Original) The interface of claim 17 wherein the device driver is capable of publishing the class to which it belongs.

19. (Original) The interface of claim 17 wherein the kernel module identifies the class of the device driver.

20. (Original) The interface of claim 17 wherein the device driver is capable of accessing the hardware device in parallel with the diagnostic module.

21. (Original) The interface of claim 17 wherein the kernel module is capable of determining whether diagnostics are performable on the hardware device.

22. (Original) The interface of claim 17 wherein the class of the device driver is dependent on the hardware device.

23. (Original) The interface of claim 17 wherein the class of the device driver is dependent on the mode of the device driver.

24. (Original) The interface of claim 17 wherein the class of the device driver is dependent on both the mode of the device and the hardware device.

25. (Currently Amended) The method of claim 4 wherein the step of publishing the capability of a device driver further comprises broadcasting that the device driver is capable of accessing the computer hardware device in parallel with a diagnostic module.

26 (Currently Amended) A system for testing one or more devices attachable to a computer system, comprising:

a device access kernel, wherein said device access kernel is capable of identifying a device driver associated with a device and determining information about how the device is accessed from the device driver what class said device driver belongs to; and

a plurality of diagnostic tests designed to respectively test said one or more devices; wherein said device access kernel selects one of said plurality of diagnostic tests for testing said device based on said information about the device is accessed determined class.